

WHAT IS CLAIMED IS:

1 An essentially purified neurotrophin, NT-7 having neurotrophic activity and an amino acid sequence as follows:

Lys Ala Asn Asp Phe Leu His Arg Gly Glu Tyr Ser Val Cys Asp Ser Glu Glu His Trp
Val Gly Asn Leu Thr Gln Ala Thr Asp Leu Arg Gly Asn Glu Val Thr Val Leu Pro His
Val Arg Ile Asn Asn Val Val Lys Lys Gln Met Phe Tyr Glu Thr Thr Cys Arg Val Ser
Lys Pro Ile Gly Ala Pro Lys Pro Gly Gln Gly Val Ser Gly Val Lys Ala Gly Thr Ser Ser
Cys Arg Gly Ile Asp Asn Glu His Trp Asn Ser Tyr Cys Thr Asn Val His Thr Phe Val
Arg Ala Leu Thr Ser Tyr Lys Asn Gln Ile Ala Trp Arg Phe Ile Arg Ile Asn Ala Ala
Cys Val Cys Val Leu Ser Arg Asn Ser Trp Arg His

or functional variants, analogues and functional fragments of NT-7.

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AAGGCCAACGACTTCTTGCATCGCGGCGAGTACTCTGTGTGTGACAGCGAAGA
GCACTGGGTTGGCAACCTGACCCAAGCCACAGACTTACGGGGCAATGAAGTCA
CGGTGCTGCCACATGTTTCGCATCAACAACGTGGTGAAGAAGCAGATGTTCTAC
GAGACCACGTGCCGTGTGTCGAAGCCCATCGGGGCCCCCAAGCCGGGTCAAG
GAGTCAGCGGCGTTAAAGCAGGAACCTCTAGCTGTCGTGGGATCGACAACGAG
CACTGGAACTCTTATTGCACCAACGTGCACACCTTTGTGCGGGCGTTAACGTCC
TACAAAAACCAGATTGCCTGGAGGTTTCATCCGAATCAACGCCGCTTGCGTGTG
CGTCCTCAGCCGCAACTCATGGAGGCAT

said nucleic sequence including degenerate versions of the sequence and
including nucleic acid sequences that hybridise under stringent conditions to said
nucleic acid sequences and encode NT-7.

- 3 A composition comprising an essentially purified neurotrophin, NT-7 having neurotrophic activity and an amino acid sequence as follows:

Lys Ala Asn Asp Phe Leu His Arg Gly Glu Tyr Ser Val Cys Asp Ser Glu Glu His Trp
Val Gly Asn Leu Thr Gln Ala Thr Asp Leu Arg Gly Asn Glu Val Thr Val Leu Pro His
Val Arg Ile Asn Asn Val Val Lys Lys Gln Met Phe Tyr Glu Thr Thr Cys Arg Val Ser
Lys Pro Ile Gly Ala Pro Lys Pro Gly Gln Gly Val Ser Gly Val Lys Ala Gly Thr Ser Ser
Cys Arg Gly Ile Asp Asn Glu His Trp Asn Ser Tyr Cys Thr Asn Val His Thr Phe Val
Arg Ala Leu Thr Ser Tyr Lys Asn Gln Ile Ala Trp Arg Phe Ile Arg Ile Asn Ala Ala
Cys Val Cys Val Leu Ser Arg Asn Ser Trp Arg His
or functional variants, analogues and functional fragments of NT-7.

- 4 An essentially purified neurotrophin NT-7 having neurotrophic activity and an amino acid sequence as follows:

Lys Ala Asn Asp Phe Leu His Arg Gly Glu Tyr Ser Val Cys Asp Ser Glu Glu His Trp
Val Gly Asn Leu Thr Gln Ala Thr Asp Leu Arg Gly Asn Glu Val Thr Val Leu Pro His
Val Arg Ile Asn Asn Val Val Lys Lys Gln Met Phe Tyr Glu Thr Thr Cys Arg Val Ser
Lys Pro Ile Gly Ala Pro Lys Pro Gly Gln Gly Val Ser Gly Val Lys Ala Gly Thr Ser Ser
Cys Arg Gly Ile Asp Asn Glu His Trp Asn Ser Tyr Cys Thr Asn Val His Thr Phe Val
Arg Ala Leu Thr Ser Tyr Lys Asn Gln Ile Ala Trp Arg Phe Ile Arg Ile Asn Ala Ala
Cys Val Cys Val Leu Ser Arg Asn Ser Trp Arg His
or functional variants, analogues and functional fragments of NT-7 in the
treatment of acute and/or chronic neuronal injury or degenerative states for a
specific subclass of neurons.

- 5 The use of an essentially purified neurotrophin NT-7 having neurotrophic activity and an amino acid sequence as follows:

Lys Ala Asn Asp Phe Leu His Arg Gly Glu Tyr Ser Val Cys Asp Ser Glu Glu His Trp
Val Gly Asn Leu Thr Gln Ala Thr Asp Leu Arg Gly Asn Glu Val Thr Val Leu Pro His
Val Arg Ile Asn Asn Val Val Lys Lys Gln Met Phe Tyr Glu Thr Thr Cys Arg Val Ser
Lys Pro Ile Gly Ala Pro Lys Pro Gly Gln Gly Val Ser Gly Val Lys Ala Gly Thr Ser Ser
Cys Arg Gly Ile Asp Asn Glu His Trp Asn Ser Tyr Cys Thr Asn Val His Thr Phe Val
Arg Ala Leu Thr Ser Tyr Lys Asn Gln Ile Ala Trp Arg Phe Ile Arg Ile Asn Ala Ala
Cys Val Cys Val Leu Ser Arg Asn Ser Trp Arg His

or functional variants, analogues and functional fragments of NT-7 in the
identification of additional members of the neurotrophin family.

add
BY

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